

I Claim:

1. An apparatus for supplying power, comprising:

a mechanical energy storage device; and

a deformable piezoelectric transducer for supplying an electrical voltage upon being bent by deformation work emitted by said mechanical energy storage device.

2. The apparatus according to claim 1, wherein said transducer is a rod with a first end that is fixedly held and a second end that can be bent with respect to said first end.

3. The apparatus according to claim 1, wherein said transducer is a rod with a first end that is fixedly held and a second end that can be bent in two opposite directions with respect to said first end.

4. The apparatus according to claim 1, wherein said transducer is formed from at least two piezoelectric partial elements that are connected in series.

5. The apparatus according to claim 1, wherein said transducer is formed from at least two piezoelectric partial elements that are connected in parallel.

6. The apparatus according to claim 1, further comprising:

a contact surface;

said transducer being bendable in a bending direction towards said contact surface.

7. The apparatus according to claim 1, wherein said transducer is bendable between two end positions.

8. The apparatus according to claim 1, wherein said energy storage device stores available process energy.

9. The apparatus according to claim 1, wherein said energy storage device has a storage capacity and when said storage capacity of said energy storage device is exceeded, said transducer is supplied with said deformation work as energy emitted by said energy storage device.

10. The apparatus according to claim 9, wherein said storage capacity of said energy storage device defines a switching point.

11. The apparatus according to claim 1, wherein said deformation work is transferred from said energy storage device to said transducer in a short time.

12. The apparatus according to claim 1, wherein said energy storage device is a spring.

13. The apparatus according to claim 12, wherein said spring has a dead point.

14. The apparatus according to claim 13, wherein:

said transducer is bendable between two end positions;

one of said end positions located on one side of said dead point; and

another one of said end positions located on another side of said dead point.

15. The apparatus according to claim 1, in combination with a sensor being supplied with the power from the apparatus.